

£700 LAPTOPS

INTRODUCTION

After Christmas is over, it can be tempting to pick up a bargain-basement laptop on the high street during the January sales. Although you can buy an inexpensive computer this way, you may end up with a less powerful model that can't do everything you need.

Paying a little more for your laptop will get you the latest processors, ample amounts of RAM and hard disk space, long-lasting batteries and even good 3D performance.

This month, we've tested six of the latest laptops, all of which cost around £700 including VAT. Some have huge 17in displays, some are powerful enough for the most demanding Windows tasks, and one can even handle the latest 3D games.

Whatever you need, there's a laptop here for you, at a price that won't break the bank.

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BIG-BRAND NOTEBOOKS

A laptop with a 17in display, generous RAM, top-of-the-range processor and 3D performance can be yours for just £700. We test six big-brand beauties

Choosing a... £700 Laptop

Even though all the laptops in this month's *Labs* cost around the same, they have very different specifications and strengths. The laptop you choose will depend on what you want to use it for. Our buying guide can help point you in the right direction.

KEY WORKERS

As you can't replace them, it's vital that the laptop you choose has a comfortable keyboard and pointing device. It's no use having a powerful laptop if it's a pain to use. Keyboards should have well-spaced, responsive keys that feel firm yet give just the right amount of feedback when pressed. Touch pads should be large and accurate with responsive buttons. The laptop with the best combination of input devices is Samsung's R70. Lenovo's ThinkPad and Toshiba's Tecra have touch sticks in addition to touch pads. These can be tricky to use until you get used to them.

Three laptops here are preinstalled with Windows Vista Home Premium. This comes with Media Center, which lets you browse your media library and record TV programmes using an add-on TV tuner. HP's laptop comes with Windows Vista Business. This lacks Media Center but comes with basic scanning and faxing utilities and Remote Desktop, which lets you control the

laptop from another PC over a network connection. Lenovo's ThinkPad R61i comes with the older Windows XP Professional operating system, which may be preferable if you use older programs that don't yet work with Vista. Toshiba's Tecra comes with Vista Business preinstalled, but you can downgrade to Windows XP Professional Edition using the included disc.

WEIGHT FOR IT

If your laptop will spend most of its time inside your home, it doesn't matter how large or heavy it is. Size and weight are more important if you travel regularly. Laptops with larger screens are heavier and larger than those with smaller screens. The 17in widescreen laptops in the group weigh at least three kilograms. Most 15.4in widescreen laptops weigh just under three kilograms, although Samsung's R70 is lighter than most at 2.6kg. Lenovo's ThinkPad R61i is the only 14.1in widescreen laptop here, and is a comparatively lightweight 2.4kg.

An easy-to-carry laptop is of little use if its battery life is so poor you spend more time looking for a power socket than working. To be usable on the road a laptop should last for more than three hours, and all the laptops in the group managed this. Toshiba's Tecra lasted the longest, at four hours.





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TOSHIBA Tecra A9-12G

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A high-quality display is also important. We've judged the colour accuracy, brightness and viewing angles of each laptop's screen. See the individual reviews for details of which are eyesores and which are a sight to behold.

The 17in widescreen displays have a high resolution of 1,440x900 pixels, which makes it easier to work on panoramic photos or expansive spreadsheets. The 14.1in and 15.4in screens have the same 1,280x800 resolution as each other. The Eclipse, MSI and Samsung laptops' displays have a glossy reflective finish, which makes colours appear richer and increases contrast, making them ideal for watching movies. This finish makes the displays more prone to reflections, though, so these laptops aren't ideal for use in bright office environments.

SEEING DOUBLE

All the laptops in the group have dual-core processors. Five have Intel Core 2 Duo processors, while MSI's GX 610 uses an AMD Turion 64 X2 TL-58 processor.

The six laptops are evenly divided between those that have 1GB of RAM and those with 2GB. Running multiple applications simultaneously, as well as certain tasks such as photo manipulation, will benefit from more memory. The fastest laptop in our application performance benchmarks was Eclipse's Titan I75, which has a fast Core 2 Duo processor and 2GB of RAM.

Most of the laptops here aren't powerful enough for playing the very latest games at high detail settings, but MSI's GX 610 did manage a respectable score in our Call of Duty 2 benchmark thanks to its DirectX 10-compatible ATI Mobility Radeon HD2600 graphics card. Even if you don't want to play games, a dedicated graphics chip has advantages. Unlike integrated graphics chips, they don't share graphics memory with the system RAM, so there's more for your applications and Windows to use.

We'd expect a £700 laptop to have at least a 120GB hard disk, preferably 160GB. Those with

large collections of media files will appreciate the 200GB disk in Samsung's R70. The 80GB disk in Toshiba's Tecra is a bit stingy. It's fine for storing office documents, but is too cramped for storing more than a few videos or photo albums.

All the laptops reviewed have expansion card slots so you can add extra capabilities, such as eSATA ports or Draft-N wireless networking, in future. The laptops are evenly divided between those that have CardBus slots and those with ExpressCard/54 slots. ExpressCard/54 is the successor to CardBus, although there are still plenty of CardBus peripherals available.

Lucky numbers Using two monitors

One advantage that many PCs have over laptops is that they can connect to two or more monitors. This gives you more space to work in, especially if you often have multiple programs open at the same time, or use programs with lots of windows and palettes, such as Photoshop. The number of monitors you connect is limited only by the number of graphics cards you can fit inside your PC.

Although many laptops have two video outputs, such as an HDMI and a D-sub socket, they can use only one external monitor at a time without the aid of an add-on card. There

are no ExpressCard/54 cards available, but CardBus cards such as VillageTronic's VTBook, which cost around £200, give you an extra DVI port for a second monitor.

You can also buy USB to DVI and D-sub adaptors, such as Matrox's DualHead2Go or Tritton's SEE2 for around £100. But not all USB adaptors support widescreen resolutions or are fast enough for games or playing video.

Samsung's UbiSync range of monitors can connect to a computer using USB instead of DVI or D-sub. The 19in UbiSync SyncMaster 940UX costs around £200.



ECLIPSE Titan I75



£700 inc VAT
From www.eclipsecomputers.com

Eclipse's Titan I75 performs well in Windows, but is let down by its poor screen.

FEATURES

Eclipse's Titan is one of two 17in widescreen laptops here, but its display is disappointing. Despite its glossy finish, colours looked dark and gloomy. White areas had a grey cast, the backlight was uneven and images looked grainy. It's the worst laptop display here.

The Titan's keyboard has a numeric keypad for fast number entry in spreadsheets. It has a non-standard layout, with the Enter and full-stop keys in the wrong place. This is a shame, considering the large areas of unused plastic to either side of the keyboard. The keys don't feel as spongy as those on the MSI laptop, but they're uncomfortable to use after long periods. The touch pad buttons are a little small, but the pad itself is accurate.

The Titan is one of three laptops here with an HDMI port. It also has four USB2 ports and an optical S/PDIF output, but there's no FireWire port for connecting older DV cameras.

PERFORMANCE

The Titan's Core 2 Duo T7500 processor is the fastest here, and it's one of three laptops here with 2GB of RAM. It was easily the fastest laptop in our Windows performance tests, with a score of 176. The Titan's Nvidia GeForce 8600M GS graphics gave it the second-highest Call of Duty 2 score in the group, at just less than 14fps, but you'll still need to reduce the display resolution and graphical settings to get smooth frame rates in the latest games.

Although the Titan had the second-shortest battery life in our group, it lasted over three-and-a-half hours, which is enough for a fairly long train journey.

VERDICT

Eclipse's Titan is a good choice if you need the best possible Windows performance, but you'll have to put up with a very poor screen and a spongy keyboard.

SUMMARY

- ✓ Fast in Windows
- ✓ Large display
- ✗ Poor-quality screen and keyboard

GENERAL-PURPOSE NOTEBOOK Intel Core 2 Duo T7500, 2GB RAM, 120GB disk, Nvidia GeForce 8600M GS graphics, DVD+/-RW +/-DL, 17in widescreen LCD, 3.2kg
PART CODE Titan I75
DETAILS www.eclipsecomputers.com



HP Compaq 6820s



£676 inc VAT
From www.laptopsdirect.co.uk

HP's Compaq 6820s may not be the fastest laptop here, but it has a high-resolution screen and a good keyboard.

FEATURES

The Compaq 6820s has a numeric keypad which can speed up data entry in spreadsheets. The keyboard has responsive keys and is very comfortable to use. The touch pad is small but accurate, but the buttons lack feedback when pressed. The three USB2 ports are underneath the ExpressCard/54 slot, so are hard to access if you have a bulky ExpressCard plugged in.

The laptop's screen has a matt finish, so is more suitable for use in bright lighting than a reflective display. It's not very bright and white areas look greyish. The 17in screen's 1,440x900 resolution leaves plenty of room for large documents. There was some banding in our greyscale transition test, but our colour gradient test was reproduced smoothly.

PERFORMANCE

This was the slowest laptop with an Intel processor in our application benchmarks, although it wasn't far behind Samsung's R70 in our video- and image-editing tests. It has only 1GB of RAM, so didn't do well in our memory-intensive image-editing and multitasking tests.

The laptop has an ATI Radeon X1350 graphics chipset, from ATI's previous graphics generation. It didn't fare well in our demanding 3D gaming test and managed less than 10fps in our Call of Duty 2 benchmark. This is the lowest score for a laptop with a dedicated graphics chipset here.

We were more impressed with its lengthy battery life of three hours and 48 minutes, just a few minutes behind the front-runners in our light usage test. The laptop also has one of the larger hard disks in the group, at 160GB.

VERDICT

As we went to press, this model was available from Laptops Direct for £430. That's excellent value, but Samsung's R70 is better overall.

SUMMARY

- ✓ Good keyboard
- ✓ Large display; big hard disk
- ✗ Disappointing 2D performance

GENERAL-PURPOSE NOTEBOOK Intel Core 2 Duo T5470, 1GB RAM, 160GB disk, ATI Mobility Radeon X1350 graphics, DVD+/-RW +/-DL, 17in widescreen LCD, 3.1kg
PART CODE GR712ET
DETAILS www.hp.co.uk



LENOVO ThinkPad R61i 77324TG



£650 inc VAT
From www.laptopsdirect.co.uk

Lenovo's ThinkPad R61i is compact and sturdy, but its mediocre display means it just misses out on an award.

FEATURES

At 2.4kg, Lenovo's ThinkPad R61i is the lightest laptop here, and its matt black case feels sturdy and rigid. The 14.1in screen has a matt finish, and the same 1,280x800 resolution as the other 15.4in laptops here. It's reasonably bright but the backlight is uneven. White areas had a slight blue cast and we noticed some speckling in our colour and greyscale transition tests.

The R61i has a touch stick pointing device, which can be tricky to get used to, although a conventional touch pad is also present. The keyboard is responsive and comfortable to type on, and is the best in the group.

A small light mounted above the display illuminates the keyboard for use in poorly lit places. Unlike the other laptops here, Windows XP is preinstalled rather than Vista.

PERFORMANCE

Even though the ThinkPad has only 1GB of RAM, it outperformed laptops with twice as much memory in our video-encoding and applications tests thanks to its 2GHz Core 2 Duo T7250 processor. There's plenty of room for images and video on its 160GB hard disk.

The R61i's integrated Intel GMA X3100 graphics chip isn't powerful enough to play the latest 3D games. It couldn't run our Call of Duty 2 benchmark at our standard settings. The ThinkPad was the third longest-lasting laptop in our light-usage battery test, managing three hours and 51 minutes. This is only a few minutes behind the leaders, and is long enough for an afternoon out of the office.

VERDICT

This laptop has a responsive keyboard, fast performance and sturdy chassis, but we were disappointed by the display's image quality.

SUMMARY

- ✓ Light; feels tough
- ✓ Excellent keyboard; big hard disk
- ✗ Disappointing display

GENERAL-PURPOSE NOTEBOOK Intel Core 2 Duo T7250, 1GB RAM, 160GB disk, Intel GMA X3100 graphics, DVD+/-RW +/-DL, 14.1in widescreen LCD, 2.4kg
PART CODE NA04TUK
DETAILS www.pc.ibm.com/uk



MSI GX 610

★★★★

£715 inc VAT

From [www.lambda-tek.com/
componentshop](http://www.lambda-tek.com/componentshop)

MSI's GX 610 is fast enough to play the latest games, but poor design choices dent its appeal.

FEATURES

The GX 610 has an attractive glossy black lid, but the same material is also used on the wrist rests below the keyboard, which easily picks up smudged fingerprints. The distractingly loud cooling fan is audible even when there aren't any demanding applications running.

Those doing lots of typing will find the spongy keyboard uncomfortable. A numeric keypad is built in for easy number entry in spreadsheets, but other keys have been made narrower to accommodate it. The large touch pad feels accurate and the buttons have plenty of feedback.

The glossy 15.4in widescreen display is one of the best screens here. Colours looked bright and the backlight was evenly lit. Our colour transition test was reproduced smoothly, although there was some banding in our greyscale gradient test.

PERFORMANCE

Thanks to its ATI Mobility Radeon HD2600 graphics chip, this was the fastest laptop in our Call of Duty 2 test, scoring just under 21fps. It can play the latest games, although you'll have to lower the graphical detail settings or resolution.

It wasn't as impressive in our application benchmarks. It's the only laptop here with an AMD processor, the Turion 64 X2-TL58, and lagged behind its Intel-based competitors in our image- and video-editing tests. Thanks to its 2GB of RAM, it did better in our multitasking benchmark, coming third with a score of 152.

Battery life is three hours and four minutes, which is enough for an afternoon's work.

VERDICT

This is the best laptop in the group for games and has a great screen, but its cooling fan is annoying and the keyboard is poor.

SUMMARY

- ✓ Fast in games; impressive display
- ✗ Disappointing 2D performance; loud
- ✗ Spongy keyboard

GENERAL-PURPOSE NOTEBOOK AMD Turion 64 X2 TL-58, 2GB RAM, 120GB disk, ATI Mobility Radeon HD2600 graphics, DVD+/-RW +/-DL, 15.4in widescreen LCD, 2.8kg
PART CODE GX610-019UK
DETAILS www.msicomputer.co.uk



SAMSUNG R70

★★★★★

£676 inc VAT

From www.cclonline.com

Although we've seen Samsung's R70 before, we really wanted to compare this updated model against the competition.

FEATURES

The chassis may not be a new design, but it's attractive and feels well made. The keyboard is comfortable to type on, although not quite as responsive as the ThinkPad's. The touch pad is small but accurate and the buttons give plenty of feedback when pressed.

The R70 can be connected to a high-definition TV using the HDMI port. If you have a large collection of media files then you'll appreciate the 200GB hard disk, which is the largest here. The R70 is the only laptop here with integrated Draft-N wireless networking.

Although the 15.4in widescreen display isn't as pleasing as the MSI GX 610's screen, it's still one of the better screens in the group. Colours look bright and rich, although there was some speckling and banding in our colour and greyscale transition tests.

PERFORMANCE

Even though the R70 has a generous 2GB of RAM, it had to settle for a mid-table position in most of our benchmarks, scoring 135 overall. Its 1.66GHz Core 2 Duo T5450 processor is fast enough for most tasks, but was outperformed by Lenovo's, Toshiba's and Eclipse's laptops.

The R70 is also not very fast in modern 3D games, and managed just 13.3fps in our Call of Duty 2 benchmark. The good thing about the dedicated GeForce 8400M GS graphics chip is that it doesn't share system memory like the integrated graphics chips in the ThinkPad and Tecra laptops. We were more impressed with the three-hour, 55-minute battery life, which was the second longest here.

VERDICT

This may not be the fastest laptop in 2D or 3D applications, but its keyboard, large hard disk and long battery life make it an award winner.

SUMMARY

- ✓ Very large hard disk
- ✓ Impressive display
- ✓ Good keyboard

GENERAL-PURPOSE NOTEBOOK Intel Core 2 Duo T5450, 2GB RAM, 200GB disk, Nvidia GeForce 8400M GS graphics, DVD+/-RW +/-DL, 15.4in widescreen LCD, 2.6kg
PART CODE NP-R70A007/SUK
DETAILS www.samsung.com/uk



TOSHIBA Tecra A9-12G

★★★★

£686 inc VAT

From [www.lambda-tek.com/
componentshop](http://www.lambda-tek.com/componentshop)

Toshiba's Tecra has some appealing features, but is outclassed by the competition.

FEATURES

The Tecra comes preinstalled with Windows Vista Business, although you can downgrade to Windows XP Professional Edition using the bundled disc. The 80GB hard disk is the smallest here, and you'll quickly run out of room if you store a lot of video, music and photos. The Tecra has a serial port, which is useful for owners of older peripherals, but an extra USB2 or FireWire port would have been more useful for most people.

The Tecra has a touch stick and touch pad. The touch pad is jittery, so you may be tempted to use the touch stick, but its buttons feel spongy and unresponsive compared to the touch pad's buttons so neither pointing device is ideal. This is a shame, especially as the keyboard's well-spaced keys are responsive and comfortable to use.

This is one of three laptops here with a matt-finish display. It's not very bright, but colours are reproduced accurately, and both our colour and greyscale transitions looked smooth with only minimal banding.

PERFORMANCE

The Tecra lasted four hours in our light-usage test. Although this is the longest battery life of any laptop in this group, Samsung's, Lenovo's and HP's laptops weren't far behind.

Although the Tecra has only 1GB of RAM, it still fared well in our Windows benchmarks, coming third overall with a score of 153. Its integrated graphics chip isn't up to playing the latest 3D games, and it failed to run our Call of Duty 2 game test at our default settings.

VERDICT

The Tecra has a good screen and impressive battery life, but the poor touch pad and small hard disk count against it. Samsung's R70 is a better buy.

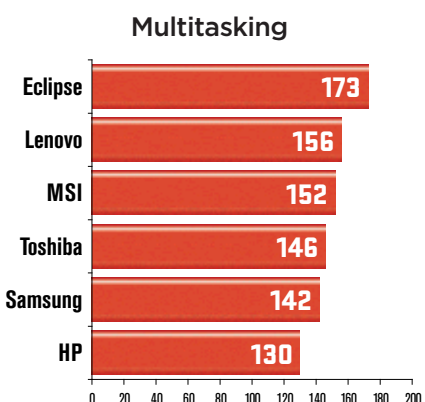
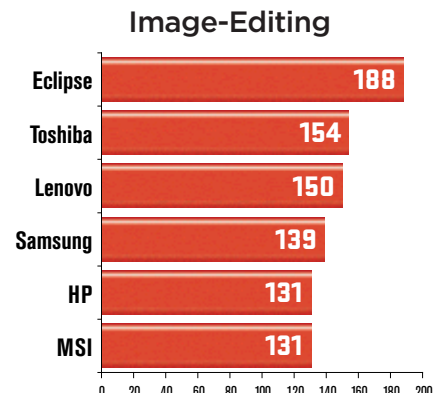
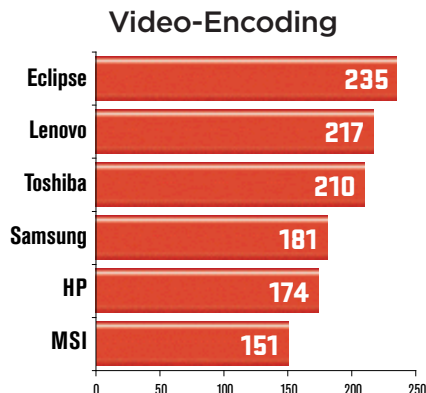
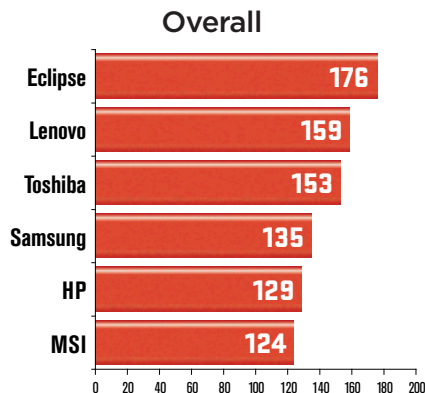
SUMMARY

- ✓ Good keyboard; long battery life
- ✗ Poor touch pad
- ✗ Small hard disk

GENERAL-PURPOSE NOTEBOOK Intel Core 2 Duo T7250, 1GB RAM, 80GB disk, Intel GMA X3100 graphics, DVD+/-RW +/-DL, 15.4in widescreen LCD, 2.9kg
PART CODE PT552E-05Y02LEN
DETAILS <http://uk.computers.toshiba-europe.com>

BENCHMARKS

2D Performance Shopper application tests



Computer Shopper's 2D benchmarks are designed to show how PCs stand up to the toughest tasks Windows can throw at them. Today's PCs have no problem running office applications such as Word and Excel, so we have chosen to focus our tests on areas where you could experience difficulties.

There are four scripts. Encoding a video to MPEG2 format is an extremely processor-intensive task that anyone interested in transferring home videos to DVD will have to tackle. Our image-editing test simulates a session of photo enhancement using Paint Shop Pro X, culminating with the composition of a panorama from a set of snaps. In our third test, a set of audio files is ripped to MP3 format. Finally, the multitasking benchmark

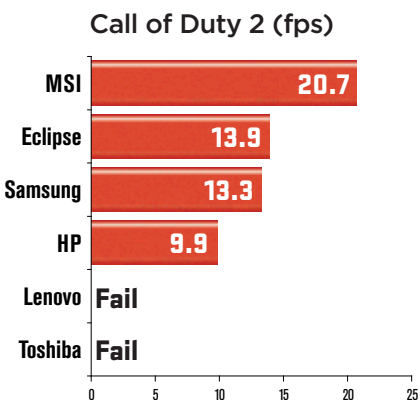


SETTINGS We run our application tests at the notebook's native resolution in 32-bit colour
WEB www.computershopper.co.uk

tests the real-life benefits of Hyper-Threaded and dual-core processors. This test compresses a DVD for playback on a Pocket PC at the same time as running our image-editing test.

Figures are relative to a reference Evesham Athlon 64 3500+, which scores 100 in all tests.

3D Performance Call of Duty 2

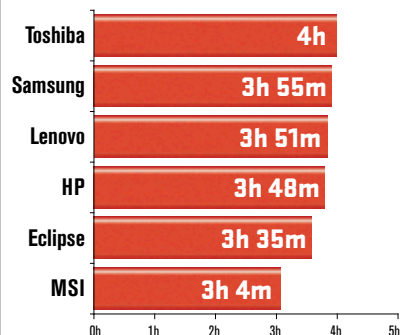


SETTINGS
 1,024x768
 resolution, high
 quality, 4x AA
WEB www.futuremark.com

Call of Duty 2 uses DirectX and is one of the most demanding games available. With a wide range of effects and frenetic action, it tests every aspect of graphics performance.

A good score here indicates that a PC should cope with any graphically intense 3D game coming on to the market today.

Battery life Run time



Our battery test involves light browser use with the display at its middle brightness setting.

Labs verdict £700 laptops

This Labs was particularly difficult to judge as all the contenders have distinct advantages and useful features.

Eclipse's Titan I75 has an impressive specification for the price and is very fast in Windows, so it's appealing if you regularly run demanding programs. Its display is poor, though.

If you want a compact computer to play the latest games, MSI's GX 610 is the obvious choice. It has powerful dedicated graphics and performed well in our demanding Call of Duty

2 test. Unfortunately, it's not particularly fast in Windows and you'll have to put up with its spongy keyboard and loud fan.

We were particularly fond of Lenovo's ThinkPad R61i. It's sturdy, relatively light and has a very responsive keyboard. Unfortunately, its display quality wasn't quite up to the standard we'd expect from a laptop at this price, so it just missed out on an award.

The winner of this Labs is Samsung's R70. This is the most well-rounded laptop here, with long battery life, a very large hard disk and a

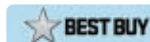


**SAMSUNG
R70**

★★★★★



comfortable keyboard and touch pad. It wasn't the fastest laptop in our tests, but it's quick enough for all but the most demanding of users. It wins our Best Buy award.



MANUFACTURER	ECLIPSE	HP	LENOVO	MSI	SAMSUNG	TOSHIBA
Model	Titan I75	Compaq 6820s	ThinkPad R61i 77324TG	GX 610	R70	Tecra A9-12G
Rating	★★★	★★★★	★★★★	★★★	★★★★★	★★★
Processor	Intel Core 2 Duo T7500	Intel Core 2 Duo T5470	Intel Core 2 Duo T7250	AMD Turion 64 X2 TL-58	Intel Core 2 Duo T5450	Intel Core 2 Duo T7250
Speed	2.2GHz	1.6GHz	2GHz	1.9GHz	1.66GHz	2GHz
Memory installed	2GB	1GB	1GB	2GB	2GB	1GB
Memory slots (free)	2 (0)	2 (1)	2 (1)	2 (0)	2 (0)	2 (1)
Max memory	4GB	4GB	4GB	2GB	4GB	4GB
BIOS	Phoenix	HP	Lenovo	AMI	Phoenix	Toshiba
Dimensions (HxWxD)	39x394x279mm	40x394x285mm	40x336x239mm	40x355x280mm	40x357x264mm	45x366x268mm
Weight	3.2kg	3.1kg	2.4kg	2.8kg	2.6kg	2.9kg
Sound	RealTek HD Audio	SoundMax HD Audio	SoundMax HD Audio	RealTek HD Audio	RealTek HD Audio	RealTek HD Audio
Pointing device	Touch pad	Touch pad	Touch pad and touch stick	Touch pad	Touch pad	Touch pad and touch stick
DISPLAY						
Screen size	17in widescreen LCD	17in widescreen LCD	14.1in widescreen LCD	15.4in widescreen LCD	15.4in widescreen LCD	15.4in widescreen LCD
Graphics adaptor	Nvidia GeForce 8600M GS	ATI Mobility Radeon X1350	Intel GMA X3100	ATI Mobility Radeon HD2600	Nvidia GeForce 8400M GS	Intel GMA X3100
Graphics outputs	HDMI, DVI	D-sub	D-sub	HDMI, D-sub, S-video	HDMI, D-sub	D-sub
Graphics memory	256MB dedicated	128MB dedicated	256MB shared	256MB dedicated	128MB dedicated	128MB shared
Native resolution	1,440x900	1,440x900	1,280x800	1,280x800	1,280x800	1,280x800
STORAGE						
Hard disk (available)	120GB (111GB)	160GB (149GB)	160GB (143GB)	120GB (111GB)	200GB (176GB)	80GB (73GB)
Optical drive	DVD+/-RW +/-DL	DVD+/-RW +/-DL	DVD+/-RW +/-DL	DVD+/-RW +/-DL	DVD+/-RW +/-DL	DVD+/-RW +/-DL
Optical drive speeds	TSST SN-S082H (8X DVD+R, 8X DVD-R, 8X DVD+RW, 6X DVD-RW, 6X DVD+R DL, 4X DVD-R DL, 5X DVD-RAM, 24X CD-R, 24X CD-RW, 8X DVD-ROM, 24X CD-ROM)	Matshita UJ-85JS (8X DVD+R, 8X DVD-R, 8X DVD+RW, 6X DVD-RW, 4X DVD+R DL, 4X DVD-R DL, 5X DVD-RAM, 24X CD-R, 16X CD-RW, 8X DVD-ROM, 24X CD-ROM)	Matshita UJ-850 (8X DVD+R, 8X DVD-R, 8X DVD+RW, 6X DVD-RW, 4X DVD+R DL, 4X DVD-R DL, 5X DVD-RAM, 24X CD-R, 16X CD-RW, 8X DVD-ROM, 24X CD-ROM)	Sony NEC Optiarc AD-7530A (8X DVD+R, 8X DVD-R, 8X DVD+RW, 6X DVD-RW, 4X DVD+R DL, 4X DVD-R DL, 5X DVD-RAM, 24X CD-R, 24X CD-RW, 8X DVD-ROM, 24X CD-ROM)	TSST TS-L632D (8X DVD+R, 8X DVD-R, 8X DVD+RW, 6X DVD-RW, 6X DVD+R DL, 6X DVD-R DL, 24X CD-R, 24X CD-RW, 8X DVD-ROM, 24X CD-ROM)	Teac DV-W28ECT (8X DVD+R, 8X DVD-R, 8X DVD+RW, 6X DVD-RW, 4X DVD+R DL, 4X DVD-R DL, 5X DVD-RAM, 24X CD-R, 16X CD-RW, 16X DVD-ROM, 24X CD-ROM)
PORTS AND EXPANSION						
USB2 ports	4	3	3	4	3	3
FireWire	0	0	1	1	0	0
Infrared port	No	No	No	No	No	No
Bluetooth	No	Yes	Yes	Yes	No	Yes
Networking	10/100, 802.11a/b/g	10/100, 802.11a/b/g	10/100/1,000, 802.11a/b/g	10/100/1,000, 802.11b/g	10/100, 802.11n	10/100/1,000, 802.11a/b/g
PC card slots	1x ExpressCard/54	1x ExpressCard/54	1x CardBus	1x ExpressCard/54	1x CardBus	1x CardBus
Modem	Yes	Yes	Yes	Yes	Yes	Yes
Legacy ports	None	None	None	None	None	Serial
Memory card reader	Secure Digital, MultiMedia Card, Memory Stick Pro	Secure Digital, MultiMedia Card	Secure Digital, MultiMedia Card	Secure Digital, MultiMedia Card, Memory Stick Pro, xD	Secure Digital, MultiMedia Card, Memory Stick Pro, xD	Secure Digital, MultiMedia Card, Memory Stick Pro, Smart Media, xD
Other ports	Optical S/PDIF output	None	Docking station connector	None	None	None
MISCELLANEOUS						
Carrying case	No	No	No	Yes	No	No
Direct CD control	No	No	No	No	Yes	No
Operating system	Windows Vista Home Premium	Windows Vista Business	Windows XP Professional Edition	Windows Vista Home Premium	Windows Vista Home Premium	Windows Vista Business
Operating system restore option	Windows disc	Restore partition	Restore partition	Restore partition, restore disc	Restore partition, restore disc	Restore disc
Software included	None	None	Diskeeper Home Edition 9.0, PC-Doctor 5.00.4559	CyberLink PowerDVD 7, CyberLink PowerProducer 3, CyberLink Power2Go5, Microsoft Works 8.5	None	InterVideo WinDVD 8.0.6.120, Toshiba Disc Creator 2.0.0.8, Windows XP Professional Edition downgrade disc
Other standard accessories	Integrated 1.3-megapixel webcam	None	Integrated fingerprint reader	USB mouse, integrated 1.3-megapixel webcam, screen cleaning cloth	Integrated 1.3-megapixel webcam, LCD cleaning cloth	Integrated fingerprint reader
Optional extras	None	None	None	None	None	None
BUYING INFORMATION						
Company founded	1993	1939	1984	1986	1971	1985
Employees	Not disclosed	140,000	19,000	25 UK-based	Not disclosed	Not disclosed
Technical support staff	7	Not disclosed	42	5 UK-based	Not disclosed	Not disclosed
Technical support times	9.30am-5.30pm Mon-Fri	8.30am-6pm Mon-Fri	9am-5.30pm Mon-Fri	9.30am-5pm Mon-Fri	9am-5pm Mon-Fri	8am-6pm Mon-Fri
Parts and labour warranty	One year RTB	One year collect and return	One year customer carry-in	First year collect and return, second year RTB	One year collect and return	One year collect and return
Price including VAT	£700	£676	£650	£715	£676	£686
Price excluding VAT	£596	£575	£553	£599	£575	£575
Details	www.eclipsecomputers.com	www.hp.co.uk	www.pc.ibm.com/uk	www.msicomputer.co.uk	www.samsung.com/uk	http://uk.computers.toshiba-europe.com
Supplier	www.eclipsecomputers.com	www.laptopsdirect.co.uk	www.laptopsdirect.co.uk	www.lambda-tek.com/components	www.cdonline.com	www.lambda-tek.com/components
Part code	Titan I75	GR712ET	NA04TUK	GX610-019UK	NP-R70A007/SUK	PTS52E-05Y02LEN